

No. 040331A

# Foundation Foliar Brush Spray Recommendation

OPERATOR: USDOE Western Area Power Administration CONTACT: Steve Tuggle

ADDRESS: 114 Parkshore Drive; Folsom, CA 95630-4710

COUNTIES: Counties with WAPA lines from Oregon south to Alameda and San Joaquin Counties

PERMIT/ID #: NA - Use will be reported by QAL contractor

LOCATION: Transmission towers and lines in WAPA area, per WAPA project maps.

	RATE PER	RATE PER	VOLUME
MATERIAL (ADD IN ORDER LISTED)	ACRE	100 GAL	PER ACRE
(1) Garlon 4	Variable	1 gallon	
(2) Accord Concentrate	۲,	2 gallons	Variable -
(3) In-Place Deposition-Retention Agent*	٠.	3 pints	Spot
(3) Syl-Tac Adjuvant	۲,	1.5 gallons	Treatment
(4) Colorfast Purple Dye	۲,	1 quart	J

## **HAZARDS AND/OR RESTRICTIONS:**

- DO NOT TREAT T&E PLANTS UNLESS PERMITTED BY FWS AND/OR CDF&G\*\*
- OBSERVE ALL LABEL PRECAUTIONS. DO NOT ALLOW DRIFT FROM TREATMENT AREA.
- KEEP OUT OF LAKES, PONDS, STREAMS, AND OTHER BODIES OF WATER
- APPLY ONLY UNDER CALM CONDITIONS (WIND NO GREATER THAN 10 MPH)
- RE-ENTRY: DO NOT ENTER UNTIL SPRAY SOLUTION HAS DRIED

QAL: WAPA Contractor

DATE: As needed in 2004

METHOD: Directed Foliar Spray

COMMENTS: Pre-mix Garlon 4, Accord Concentrate, and In-Place together BEFORE adding to the spray tank. \*DO NOT add In-Place separately or encapsulation will not occur. Fill tank half full of water. Add Garlon 4/AccordConcentrate/In-Place mix. Add Syl-Tac, when tank is almost full. Add dye last. Thoroughly mix and agitate the spray solution. Treat all allowed areas under towers, as well as mapped areas outside of tower perimeter and between towers in WAPA right-of-way. Apply as a directed foliar spray, using as low pressure as possible to minimize drift potential. Spray target foliage with low volume foliar technique (target volume 25 gallons volume per acre). Direct spray away from desirable plants, as damage may occur. Areas of dense weeds or brush growth may require re-treatment, especially re-sprouting species. \*\*E.g., avoid elderberry plants, unless permitted.

I hereby certify that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted. Criteria for determining need for treatment: Pest is present

Advisor's Signature:



No. 040331B

OPERATOR: USDOE Western Area Power Administration CONTACT: Steve Tuggle

ADDRESS: 114 Parkshore Drive; Folsom, CA 95630-4710

COUNTIES: Counties with WAPA lines from Oregon south to Alameda and San Joaquin Counties

PERMIT/ID #: NA - Use will be reported by QAL contractor

SITE: Utility transmission towers ACRES: Variable - Spot treatments PESTS: Weeds and Brush

LOCATION: Transmission towers and lines in WAPA area, per WAPA project maps.

	RATE PER	RATE PER	VOLUME
MATERIAL (ADD IN ORDER LISTED)	ACRE	100 GAL	PER ACRE
(1) Stalker Herbicide	Variable	1.5 gallons	J
(2) Accord Concentrate	<b>دد</b>	3 gallons	Variable -
(3) In-Place Deposition-Retention Agent*	<b>دد</b>	3 pints	Spot
(3) Syl-Tac Adjuvant	۲,	1.5 gallons	Treatment
(4) Colorfast Purple Dye	<b>دد</b>	1 quart	J

### **HAZARDS AND/OR RESTRICTIONS:**

- DO NOT TREAT T&E PLANTS UNLESS PERMITTED BY FWS AND/OR CDF&G\*\*
- OBSERVE ALL LABEL PRECAUTIONS. DO NOT ALLOW DRIFT FROM TREATMENT AREA.
- KEEP OUT OF LAKES, PONDS, STREAMS, AND OTHER BODIES OF WATER
- APPLY ONLY UNDER CALM CONDITIONS (WIND NO GREATER THAN 10 MPH)
- RE-ENTRY: DO NOT ENTER UNTIL SPRAY SOLUTION HAS DRIED

QAL: WAPA Contractor DATE: As needed in 2004 METHOD: Directed Foliar Spray

COMMENTS: Use where true oaks are a pest plants. Pre-mix Stalker, Accord Concentrate, and In-Place together BEFORE adding to the spray tank. \*DO NOT add In-Place separately or encapsulation will not occur. Fill tank half full of water. Add Stalker/Garlon 4/In-Place mix. Add Syl-Tac, when tank is almost full. Add dye last. Thoroughly mix and agitate the spray solution. Treat all allowed areas under towers, as well as mapped areas outside of tower perimeter and between towers in WAPA right-of-way. Apply as a directed foliar spray, using as low pressure as possible to minimize drift potential. Spray target foliage with low volume foliar technique (target volume 25 gallons volume per acre). Direct spray away from desirable plants, as damage may occur. Areas of dense weeds or brush growth may require re-treatment, especially re-sprouting species. \*\*E.g., avoid elderberry plants, unless permitted.

I hereby certify that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted. Criteria for determining need for treatment: Pest is present

Advisor's Signature:



No. 040331C

Riparian\* alternative to Recs 040331A &B

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ADDRESS: 114 Parkshore Drive; Folsom, CA 95630-4710

COUNTIES: Counties with WAPA lines from Oregon south to Alameda and San Joaquin Counties

PERMIT/ID #: NA - Use will be reported by OAL contractor

SITE: Utility transmission towers ACRES: Variable - Spot treatments PESTS: Weeds and Brush

LOCATION: Transmission towers and lines in WAPA area, from CA/OR border south to Alameda and San

Joaquin Counties, per WAPA project map.

	RATE PER	RATE PER	VOLUME
MATERIAL (ADD IN ORDER LISTED)	ACRE	100 GAL	PER ACRE
(1) Accord Concentrate	Variable	2-4 gallons	Variable -
(2) R-11 Spreader-Activator	"	2 quarts	} Spot
(3) Colorfast Purple or Hi-Light Blue Dye	۲,	1 quart	<b>J</b> Treatment

#### HAZARDS AND/OR RESTRICTIONS:

- DO NOT TREAT T&E PLANTS UNLESS PERMITTED BY FWS AND/OR CDF&G\*\*
- **OBSERVE ALL LABEL PRECAUTIONS**
- DO NOT ALLOW DRIFT FROM TREATMENT AREA
- RE-ENTRY: DO NOT ENTER UNTIL SPRAY SOLUTION HAS DRIED

DATE: As needed in 2004 METHOD: Foliar Spray or Cut Surface QAL: WAPA Contractor

COMMENTS: \*Use in riparian areas where Garlon 4 and Stalker use is not appropriate. Fill mix tank half-full of water. Next mix in the Accord Concentrate. If true oaks are Fill remainder of tank and mix in R-11. When surfactant is COMPLETELY blended with water, mix in dye last. Apply as a directed foliar spray, using as low pressure as possible to minimize drift potential. Spray target foliage to wet with complete coverage. Large target plants, such as arundo donax, may require a high spray volume per acre (50-100 gallons). Direct spray away from desirable plants, as damage may occur. Areas of dense weeds or brush growth may require re-treatment, especially re-sprouting species. Note: For cut surface treatments in these sites, treat cut surface with undiluted Accord Concentrate with 10 minutes of making cut. .\*\*E.g., avoid elderberry plants, unless permitted.

I hereby certify that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted. Criteria for determining need for treatment: Pest is present

Advisor's Signature:



No. 040331D

OPERATOR: USDOE Western Area Power Administration CONTACT: Steve Tuggle

ADDRESS: 114 Parkshore Drive; Folsom, CA 95630-4710

COUNTIES: Counties with WAPA lines from Oregon south to Alameda and San Joaquin Counties

PERMIT/ID #: NA - Use will be reported by QAL contractor

SITE: Utility transmission towers ACRES: Variable - Spot treatments PESTS: Weeds and Brush LOCATION: Transmission towers and lines in WAPA area, from CA/OR border south to Alameda and San

Joaquin Counties, per WAPA project map.

MATERIAL (ADD IN ORDER LISTED)	RATE PER	RATE PER	VOLUME
	ACRE	100 GAL	PER ACRE
(1) Telar	2 dry ounces	8 dry ounces	)
(2) Garlon 4	1.5 quarts	6 quarts	
(3) In-Place Deposition-Retention Agent	12 liquid oz.	3 pints	} 25 gallons
(4) Syl-Tac Adjuvant	16 liquid oz.	2 quarts	
(5) Hi-Light Blue Spray Pattern Indicator	8 liquid oz.	2 pints	J

## **HAZARDS AND/OR RESTRICTIONS:**

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- OBSERVE ALL LABEL PRECAUTIONS. DO NOT ALLOW DRIFT FROM TREATMENT AREA.
- KEEP OUT OF LAKES, PONDS, STREAMS, AND OTHER BODIES OF WATER
- APPLY ONLY UNDER CALM CONDITIONS (WIND NO GREATER THAN 10 MPH)
- RE-ENTRY: DO NOT ENTER UNTIL SPRAY SOLUTION HAS DRIED

QAL: WAPA Contractor DATE: Spring or Fall 2004 METHOD: Broadcast ground application\*

COMMENTS: Apply before final spring rains or after first settling fall rain—not during dry season. Premix Garlon 4 and In-Place together BEFORE adding to the spray tank. <u>DO NOT</u> add In-Place separately or encapsulation will not occur. Mix Telar into water first. Add Garlon 4/In-Place mix second. Then add Syl-Tac, when tank is almost full. Hi-Light Blue Spray Pattern Indicator should be added last to help evaluate spray deposition. Thoroughly mix and agitate the spray solution. Treat all allowed areas under towers and 15 feet outside of tower perimeter. \*Apply uniformly over the treatment area with an overall broadcast spray. Additionally, apply to brush plants as directed foliar spray. \*\*E.g., avoid elderberry plants, unless permitted.

I hereby certify that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted. Criteria for determining need for treatment: Pest is present

Advisor's Signature:





Typical transmission tower site with brush and broadleaf weeds

- Use Rec 040331A after end of Spring rains and before first settling Fall rain.
- Use Rec 040331B if true oaks are targets
- Use Rec 040331C if in sensitive riparian areas
- Use Rec 040331D after first settling fall rain and end of spring rains.



Close-up of tower site with brush (berries) and broadleaf weeds

 Use Recs 040331A, B, C, or D, depending on pest species, season, an proximity to water (see bullet points for picture above).



Typical area between towers

- Use Rec 040331D or 040331E
   after first settling fall rain and
   before end of spring rains. If
   targeting Yellow starthistle, wait
   until maximum YST germination
   occurs, usually February through
   the end of spring rains.
- Use 040331D if brush is present.
- Use 040331E if only herbaceous weeds are present.



No. 040331E

OPERATOR: USDOE Western Area Power Administration CONTACT: Steve Tuggle

ADDRESS: 114 Parkshore Drive; Folsom, CA 95630-4710

COUNTIES: Counties with WAPA lines from Oregon south to Alameda and San Joaquin Counties

PERMIT/ID #: NA - Use will be reported by QAL contractor

SITE: Utility transmission lines ACRES: Variable - See project map PESTS: Broadleaf Weeds

LOCATION: Between transmission towers in WAPA areas, per WAPA project maps.

MATERIAL (ADD IN ORDER LISTED)	RATE PER	RATE PER	VOLUME
	ACRE	100 GAL	PER ACRE
(1) Telar Herbicide	2 dry ounces	8 dry ounces	)
(2) Transline Herbicide	8 liquid oz.	2 pints	
(3) In-Place Deposition-Retention Agent	3 liquid oz.	12 liquid oz.	25 gallons
(4) R-11 Spreader-Activator	8 liquid oz.	2 pints	
(5) Hi-Light Blue Spray Pattern Indicator*	8 liquid oz.	2 pints	J

### **HAZARDS AND/OR RESTRICTIONS:**

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- OBSERVE ALL LABEL PRECAUTIONS. DO NOT ALLOW DRIFT FROM TREATMENT AREA.
- KEEP OUT OF LAKES, PONDS, STREAMS, AND OTHER BODIES OF WATER
- APPLY ONLY UNDER CALM CONDITIONS (WIND NO GREATER THAN 10 MPH)
- RE-ENTRY: DO NOT ENTER UNTIL SPRAY SOLUTION HAS DRIED

QAL: WAPA Contractor DATE: Winter 2004-Spring 2004 METHOD: Broadcast ground application.

COMMENTS: Pre-mix Transline and In-Place together BEFORE adding to the spray tank. **<u>DO NOT</u>** add In-Place separately or encapsulation will not occur. Mix Telar into water first. Add Transline/In-Place mix second. Then add R-11, when tank is almost full. \*Hi-Light Blue Spray Pattern Indicator <u>may</u> be added last, if desired, to help evaluate spray deposition. Thoroughly mix and agitate the spray solution. Apply uniformly over the treatment area with an overall broadcast spray. \*\*E.g., avoid elderberry plants, unless permitted.

I hereby certify that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted. Criteria for determining need for treatment: Pest is present

Advisor's Signature:



No. 040331F

OPERATOR: USDOE Western Area Power Administration CONTACT: Steve Tuggle

ADDRESS: 114 Parkshore Drive; Folsom, CA 95630-4710

COUNTIES: Counties with WAPA lines from Oregon south to Alameda and San Joaquin Counties

PERMIT/ID #: NA - Use will be reported by QAL contractor

SITE: Utility transmission lines ACRES: Variable - Spot treatments PESTS: Brush LOCATION: Transmission towers and lines in WAPA area, per WAPA project maps.

MATERIAL(ADD IN ORDER LISTED)	RATE PER	RATE PER	VOLUME PER
	ACRE	100 GAL	ACRE
(1) Garlon 4 Herbicide*	Variable	25 gallons	<b>Variable</b>
(2) Hasten Adjuvant	Variable	74.75 gallons	Single Plant
(3) Bas-Oil Red or Blue Dye **(if needed)	Variable	1.0 quart	<b>J</b> Application

### **HAZARDS AND/OR RESTRICTIONS:**

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- KEEP OUT OF LAKES, PONDS, STREAMS, AND OTHER BODIES OF WATER
- APPLY ONLY UNDER CALM CONDITIONS (WIND NO GREATER THAN 10 MPH)
- RE-ENTRY: DO NOT ENTER UNTIL SPRAY SOLUTION HAS DRIED

QAL: WAPA Contractor DATES: As needed in 2004 METHOD: Low-Volume Basal or Cut Surface

COMMENTS: Apply with a backpack sprayer using low pressure (less than 30 psi) and a cone nozzle, such as a TeeJet 5500 X-2 or X-3 adjustable cone tip. Apply herbicide mix as a basal application to the lower 15 to 18 inches of all unwanted hardwoods less than 3 inches in diameter (or remaining stump, if tree is cut). Thorough coverage of the treated area is necessary for good control. Spray to wet, not to runoff. Old or rough bark requires more spray than smooth young bark. (\* Alternate Recommendation - Treat cambium area of cut surfaces of stems larger than 3 inches in diameter with <u>undiluted</u> Garlon 4.) \*\* Add Bas-Oil Red or Blue Dye, if longer-term coverage indication is needed. \*\*\* Avoid elderberry plants, unless permitted.

I hereby certify that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted. Criteria for determining need for treatment: Pest is present Pest is known to occur Pest is present

Advisor's Signature:



No. 040331G

OPERATOR: USDOE Western Area Power Administration CONTACT: Steve Tuggle

ADDRESS: 114 Parkshore Drive; Folsom, CA 95630-4710

COUNTIES: Counties with WAPA lines from Oregon south to Alameda and San Joaquin Counties

PERMIT/ID #: NA - Use will be reported by QAL contractor

SITE: Utility transmission lines ACRES: Variable - Spot treatments PESTS: Brush LOCATION: Transmission towers and lines in WAPA area, per WAPA project maps.

MATERIAL (ADD IN ORDER LISTED)	RATE PER	RATE PER	VOLUME PER
	ACRE	100 GAL	ACRE
(1) Stalker Herbicide *	Variable	5 gallons	<b>Variable</b>
(2) Garlon 4 Herbicide *	Variable	15 gallons	Single
(3) Hasten Adjuvant	Variable	79.75 gallons	} Plant
(4) Bas-Oil Red or Blue Dye **(if needed)	** Variable	1.0 quart	<b>J</b> Application

### **HAZARDS AND/OR RESTRICTIONS:**

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- KEEP OUT OF LAKES, PONDS, STREAMS, AND OTHER BODIES OF WATER
- APPLY ONLY UNDER CALM CONDITIONS (WIND NO GREATER THAN 10 MPH)
- RE-ENTRY: DO NOT ENTER UNTIL SPRAY SOLUTION HAS DRIED

QAL: WAPA Contractor DATES: As needed in 2004 METHOD: Low-Volume Basal or Cut Surface

COMMENTS: **Use where true oaks are a problem.** Apply with a backpack sprayer using low pressure (less than 30 psi) and a cone nozzle, such as a TeeJet 5500 X-2 or X-3 adjustable cone tip. Apply herbicide mix as a basal application to the lower 15 to 18 inches of all unwanted hardwoods less than 3 inches in diameter (or remaining stump, if tree is cut). Thorough coverage of the treated area is necessary for good control. Spray to wet, not to runoff. Old or rough bark requires more spray than smooth young bark. (\* **Alternate Recommendation** - Treat cambium area of cut surfaces of stems larger than 3 inches in diameter with undiluted Garlon 4.) \*\* Add Bas-Oil Red or Blue Dye, if longer-term coverage indication is needed. \*\*\* Avoid elderberry plants, unless permitted.

I hereby certify that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted. Criteria for determining need for treatment: Pest is present Pest is known to occur Pest is present

Advisor's Signature:



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Wilbur-Ellis Company
John Taylor Fertilizers Business Unit



Typical Basal Application (Rec 040331F or G)



Typical Cut Surface Application (Alternate in Rec 040331F)